

2. REMARKS

Applicant requests favorable reconsideration of this application in view of the foregoing amendments and the following remarks.

The Office Action of August 12, 2004 withdraws the indication that claims 1-26, 28-32, 38-47, 49-51, 53-57, 61-63, 66-72, 74-78, 84-91, 94-96, 98-102, 106-108, 111-172, 176-180, 190-194, and 202-205 contain allowable subject matter and rejects those claims.

This reply amends claims 141 and 171 and cancels claim 144. A detailed listing of all claims in accordance with 37 C.F.R. § 1.121 is provided above. A listing of the claims in accordance with 37 C.F.R. § 1.173 is provided in an attachment hereto. As of the date of this reply, claims 1-26, 28-32, 38-47, 49-51, 53-57, 61-63, 66-72, 74-78, 84-91, 94-96, 98-102, 106-108, 111-143, 145-172, 176-180, 190-194, and 202-205 are pending and rejected.

a. The Rejection Based on U.S. Patent No. 5,366,473 (Winston)

The Office rejects claims 141-143, 145-149, 151, 152, and 171 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,366,473 (Winston). The claims, as amended, are patentable over Winston.

Claim 141, as amended, recites a method including the steps of “providing an expandable member” and “providing a blood vessel adjacent to an interior surface of the expandable member.” Claim 171 as amended, recites an assembly including “an expandable member” and “a blood vessel disposed adjacent to an interior surface of the expandable member.”

Winston fails to teach or suggest such a method or assembly. For example, Winston does not teach or suggest the recited method or assembly having a blood vessel disposed adjacent to an interior surface of an expandable member. Accordingly, independent claims 141 and 171 are patentable over Winston.

Claims 142, 143, 145-149, 151, and 152 depend from independent claim 141. Those dependent claims are patentable over Winston for at least the reasons explained above in regard to independent claim 141.

b. The Rejection Based on U.S. Patent No. 5,665,115 (Cragg) in view of Winston

The Office rejects claims 1, 5-7, 10, 12-15, 16, 17-19, 22-26, 29, 38-44, 49-51, 54, 61, 62, 66-72, 75, 84-90, 94-96, 106, 107, 111-121, 123, 125-133, 135, 137-140, 150,

153-156, 158, 160-170, 172, 176-180, 190-194, and 202-205 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,665,115 (Cragg) in view of Winston. This rejection is respectfully traversed.

Each of the rejected claims requires an assembly or method that includes, among other things, a “blood vessel.” The Office recognizes that Cragg does not teach an assembly or method that includes a blood vessel, but instead teaches using a synthetic material. The Office asserts that Winston teaches using a blood vessel instead of a synthetic material and that the arrangement “has the self-evident advantage of improving the biocompatibility of the assembly.” The Office further asserts that “[i]t would have been obvious to use a blood vessel as the Cragg graft 13 so that it too would have this advantage.”

Applicant respectfully submits that it would not have been obvious to modify the stent 10 disclosed in Cragg by replacing the synthetic graft 13 with the blood vessel disclosed in Winston for at least the following reasons.

Winston does not teach that a synthetic material must or should be replaced with a blood vessel. Instead, Winston merely indicates that a synthetic material or a blood vessel can be used with the structure disclosed in Winston. In other words, Winston does not suggest any reason for replacing a synthetic material with a blood vessel. The Office asserted that use of a blood vessel “has the self-evident advantage of improving the biocompatibility of the assembly,” but such a teaching is not found in Winston. It appears the Examiner is relying on information within his personal knowledge. Accordingly, Applicant requests an affidavit from the Examiner pursuant to 37 C.F.R. § 1.104(d)(2).

Moreover, Applicant submits that at the time of the invention a person of ordinary skill in the art would not have thought it advisable to replace a synthetic material with a blood vessel. Deployment of a stent to a diseased area of an artery is a procedure that is often performed in response to an urgent situation. Use of a pre-prepared stent (e.g., a commercially prepared stent that includes a graft of synthetic material) is advantageous because a pre-prepared stent reduces the physician’s preparation time for the procedure and enables timely deployment of the stent into the patient. At the time of the invention, replacing the synthetic material with a blood vessel would have introduced complications related to preparing and storing the assembly in advance of the procedure. The use of a blood vessel might require the physician to locate and harvest a suitable blood vessel from the patient and assemble the stent (i.e., attach the blood vessel to the stent). As a result, replacing a synthetic material with a blood vessel would eliminate the convenience of a pre-prepared

stent and the preparation time for the procedure would increase.¹ Additionally, the undersigned has been informed that physicians who perform stent deployments typically do not have the requisite surgical skill to harvest the blood vessel and/or to attach the blood vessel to the stent. Thus, they would not have been motivated to replace a synthetic material with a blood vessel.

Accordingly, it would not have been obvious to replace the synthetic graft 13 of Cragg with the blood vessel of Winston. Consequently, claims 1, 5-7, 10, 12-15, 16, 17-19, 22-26, 29, 38-44, 49-51, 54, 61, 62, 66-72, 75, 84-90, 94-96, 106, 107, 111-121, 123, 125-133, 135, 137-140, 150, 153-156, 158, 160-170, 172, 176-180, 190-194, and 202-205 are patentable over Cragg and Winston.

c. The Rejection Based on Cragg in view of Winston and further in view of U.S. Patent No. 5,693,085 (Buirge)

The Office rejects claims 2-4, 8-11, 16, 17, 20, 21, 28, 30-32, 45-47, 53, 55-57, 63, 74, 76-78, 91, 98-102, 108, 122, 124, 134, 136, 157 and 159 under 35 U.S.C. § 103(a) as being unpatentable over Cragg in view Winston and further in view of U.S. Patent No. 5,693,085 (Buirge). This rejection is respectfully traversed.

Each of the rejected claims requires an assembly or method that includes, among other things, a “blood vessel.” As explained above, Winston does not suggest replacing the synthetic material of Cragg with a blood vessel. Even if the assertions in the Office Action regarding the teachings of Buirge are assumed to be correct, those teachings do not remedy that deficiency of Cragg and Winston. Consequently, the rejected claims are patentable over Cragg, Winston, and Buirge.

d. Conclusion

For the aforementioned reasons, Applicant submits that claims 1-26, 28-32, 38-47, 49-51, 53-57, 61-63, 66-72, 74-78, 84-91, 94-96, 98-102, 106-108, 111-143, 145-172, 176-180, 190-194, and 202-205 are in condition for allowance. A Notice of Allowance at an early date is respectfully requested.

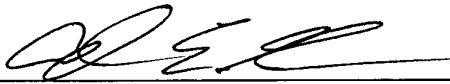
The Examiner is invited to contact the undersigned by telephone if it is believed that a telephone interview would advance the prosecution of the present application.

¹ Although the present invention involves the use of a blood vessel, the inventor teaches that the blood vessel can be, for example, a previously harvested and a frozen blood vessel. *See, e.g.*, U.S. Patent No. 5,556,414 at col. 12, lines 57-60.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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ATTACHMENT

1. An assembly for insertion into a body passageway comprising:
 - a. a cylindrical-shaped member having first and second ends, a longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall, and a longitudinal passage along said longitudinal axis between said ends, said cylindrical-shaped member having a first diameter which permits intraluminal delivery of said cylindrical-shaped member into a body passageway having a lumen, and second diameter greater than said first diameter, whereby said cylindrical-shaped member is expandable to contact or to expand the lumen of the body passageway;
 - b. a blood vessel within said longitudinal passage of said cylindrical-shaped member, said blood vessel being at least as long as said axial extent of said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition; and
 - c. securing means for securing said blood vessel within said cylindrical-shaped member to cause said blood vessel to move with said cylindrical-shaped member to and from said first diameter and said second diameter.
2. The assembly according to claim 1 wherein said blood vessel has a length longer than said longitudinal passage of said cylindrical-shaped member and said blood vessel extends beyond at least one of said first and second ends of said cylindrical-shaped member.
3. The assembly according to claim 2 wherein said blood vessel is folded over a respective edge of said end and overlies at least a portion of the external surface of said peripheral wall of said end.
4. An assembly for insertion into a body passageway comprising:
 - a. a cylindrical-shaped member having first and second ends, a longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall, and a longitudinal passage along said longitudinal axis between said ends, said cylindrical-shaped member having a first diameter which permits intraluminal delivery of said cylindrical-shaped member into a body passageway having a lumen, and second

diameter greater than said first diameter, whereby said cylindrical-shaped member is expandable to contact or to expand the lumen of the body passageway;

b. a blood vessel within said longitudinal passage of said cylindrical-shaped member, said blood vessel having a length longer than said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition, wherein said blood vessel extends beyond both of said ends and is folded over respective edges at both of said ends; and

c. securing means for securing said blood vessel within said cylindrical-shaped member to cause said blood vessel to move with said cylindrical-shaped member to and from said first diameter and said second diameter.

5. The assembly according to claim 1 or 4 wherein said structural member is in the form of a wire formed into a serpentine configuration including a plurality of loops with cusps of adjacent loops in opposing orientation forming an overlap region which adjusts to provide said first and second diameters.

6. The assembly according to claim 1 or 4 wherein said cylindrical-shaped member is a thin walled tubular member, and said one or more structural members define opening in the form of slots being disposed substantially parallel to the longitudinal axis of the tubular member, said slots being deformable to a fixed shape forming a fixed framework to support said blood vessel.

7. The assembly according to claim 1 or 4 wherein said one or more structural members have a substantially uniform thickness which is maintained during adjustment between first and second positions defining said first and second diameters which are outer diameters of said cylindrical-shaped member.

8. The assembly according to claim 1 or 4 wherein said securing means comprises glue.

9. The assembly according to claim 1 or 4 wherein said securing means comprises welds.

10. The assembly according to claim 1 or 4 wherein said securing means comprises stitches.

11. An assembly for insertion into a body passageway comprising:

a. a cylindrical-shaped member having first and second ends, longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall, and longitudinal passage along said longitudinal axis between said ends, said cylindrical-shaped member having a first diameter which permits intraluminal delivery of said cylindrical-shaped member into a body passageway having a lumen, and second diameter greater than said first diameter, whereby said cylindrical-shaped member is expandable to contact or to expand the lumen of the body passageway;

b. a blood vessel within said longitudinal passage of said cylindrical-shaped member, said blood vessel having a length longer than said axial extent of said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition, and wherein said blood vessel extends beyond at least one of said first and second ends of said cylindrical-shaped member, said blood vessel is folded over a respective edge of said end and overlies at portion of the external surface of said peripheral wall of said end, and wherein said blood vessel encompasses the entire external surface of said cylindrical-shaped member; and

c. securing means for securing said blood vessel within said cylindrical-shaped member to cause said blood vessel to move with said cylindrical-shaped member to and from said first diameter and said second diameter.

12. An assembly for insertion into a body passageway comprising:

a. a cylindrical-shaped member having first and second ends, a longitudinal axis between said ends, one or more structural members between said ends, one or more structural members between said ends defining a peripheral wall, and a longitudinal passage along said longitudinal axis between said ends, said cylindrical-shaped member having a first diameter which permits intraluminal delivery of said cylindrical-shaped member into a body passageway having a lumen, and second diameter greater than said first diameter, where said cylindrical-shaped member is expandable to contact or to expand the lumen of the body passageway;

b. a blood vessel within said longitudinal passage of said cylindrical-shaped member, said blood vessel being at least as long as said axial extent of said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition;

c. securing means for securing said blood vessel within said cylindrical-shaped member to cause said blood vessel to move with said cylindrical-shaped member to and from said first diameter and said second diameter; and

d. a delivery sheath which encompasses said cylindrical-shaped member and said blood vessel.

13. A assembly for insertion into a body passageway comprising:

a. a cylindrical-shaped member having first and second ends, longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall and a longitudinal passage along said longitudinal axis between said ends, said cylindrical-shaped member having a first diameter which permits intraluminal delivery of said cylindrical-shaped member into a body passageway having a lumen, and second diameter greater than said first diameter, whereby said cylindrical-shaped member is expandable to contact or to expand the lumen of the body passageway;

b. a blood vessel within said longitudinal passage of said cylindrical-shaped member, said blood vessel being at least as long as said axial extent of said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition;

c. securing means for securing said blood vessel within said cylindrical-shaped member to cause said blood vessel to move with said cylindrical-shaped member to and from said first diameter and said second diameter; and

d. expansion means within said cylindrical-shaped member for radially expanding said cylindrical-shaped member within a body passageway.

14. The assembly according to claim 13 wherein said means for radially expanding is a balloon catheter, said balloon catheter being received within said longitudinal passage and extending along said longitudinal axis, whereby as said balloon catheter is inflated, said balloon contacts said blood vessel and said cylindrical-shaped member to radially expand said blood vessel and said cylindrical-shaped member.

15. An assembly for insertion into a body passageway comprising:

- a. a cylindrical-shaped member having first and second ends, a longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall, and a longitudinal passage along said longitudinal axis between said ends, said cylindrical-shaped member having a first diameter which permits intraluminal delivery of said cylindrical-shaped member into a body passageway having a lumen, and second diameter greater than said first diameter, whereby said cylindrical-shaped member is expandable to contact or to expand the lumen of the body passageway and wherein said one or more structural members are adjustable to said second diameter by deformation, by stress relief, by hinges between said structural members, or by increasing the thickness of said structural members;
- b. a blood vessel within said longitudinal passage of said cylindrical-shaped member, said blood vessel being at least as long as said axial extent of said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition; and
- c. securing means for securing said blood vessel within said cylindrical-shaped member to cause said blood vessel to move with said cylindrical-shaped member to and from said first diameter and said second diameter.

16. The assembly according to claim 1, 3, 4, 11, 12, 13 or 15 wherein said blood vessel is a vein.

17. The assembly according to claim 1, 3, 12, 13 or 15 wherein said blood vessel has a length about as long as said longitudinal passage of said cylindrical-shaped member.

18. A method for implanting a composite graft within a body passageway comprising:

- a. providing a composite prosthesis comprising an expandable member comprising a cylindrical-shaped member having first and second ends, a longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall, and a longitudinal passage along said longitudinal axis between said ends; and a blood vessel carried by said cylindrical-shaped member within said longitudinal passage, said blood

47. The assembly of claim 43, wherein a first portion of the blood vessel is fixed to a second portion of the blood vessel to secure the blood vessel to the expandable member.

49. The assembly of claim 22, further comprising a catheter assembly disposed within the longitudinal passage to expand the expandable member.

50. The assembly of claim 22, wherein the expandable member is deformable.

51. A method of preparing a graft prosthesis for use within a body comprising the steps of:

providing an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable from a first geometrically stable configuration to a second geometrically stable configuration; and

providing a blood vessel adjacent to the interior surface of the expandable member.

53. The method of claim 51, further comprising the step of placing the blood vessel adjacent to an exterior surface of the expandable member.

54. The method of claim 51, wherein the blood vessel is at least as long as the longitudinal passage.

55. The method of claim 54, further comprising the step of placing the blood vessel so that a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

56. The method of claim 55, further comprising the step of folding the portion of the blood vessel that extends beyond the end of the longitudinal passage back over a first end of the expandable member to a position adjacent to an exterior surface of the expandable member.

57. The method of claim 56, further comprising the step of folding the extending portion of the blood vessel back to form a sleeve.

61. The method of claim 51, further comprising the step of securing the blood vessel to the expandable member.

62. The method of claim 51, further comprising the step of stitching the blood vessel to the expandable member.

63. The method of claim 51, further comprising the step of gluing the blood vessel to the expandable member.

66. The method of claim 51, further comprising the step of disposing the graft prosthesis in a delivery sheath.

67. The method of claim 51, further comprising the step of disposing a catheter assembly within the longitudinal passage.

68. An assembly for use within a body comprising:
a deformable member having an interior surface defining a longitudinal passage, the deformable member being deformable from a first geometrically stable configuration to a second geometrically stable configuration; and
a blood vessel disposed adjacent to the interior surface of the deformable member.

69. The assembly of claim 68, wherein the deformable member is cylindrical-shaped.

70. The assembly of claim 68, wherein the deformable member comprises a stent.

71. The assembly of claim 68, wherein the deformable member has a first configuration to allow for insertion of the assembly into a lumen in the body.

72. The assembly of claim 71, wherein the deformable member has a second configuration whereby a diameter of the longitudinal passageway approximately matches a diameter of the lumen.

74. The assembly of claim 68, wherein the blood vessel is disposed adjacent to an exterior surface of the deformable member.

75. The assembly of claim 68, wherein the blood vessel is at least as long as the longitudinal passage.

76. The assembly of claim 68, wherein a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

77. The assembly of claim 76, wherein the portion of the blood vessel that extends beyond the end of the longitudinal passage folds back over a first end of the deformable member to a position adjacent to an exterior surface of the deformable member.

78. The assembly of claim 77, wherein the extending portion of the blood vessel folds back to form a sleeve.

84. An assembly for insertion into a body passageway comprising:
a deformable member having an interior surface defining a longitudinal passage, the deformable member being deformable from a first geometrically stable configuration to a second geometrically stable configuration; and
a tissue disposed adjacent to the interior surface of the deformable member,
wherein the tissue comprises a body tissue,
wherein the body tissue comprises a blood vessel.

85. The assembly of claim 84, wherein the blood vessel comprises at least one of a recently extracted blood vessel and a thawed blood vessel which had been previously extracted and frozen.

86. The assembly of claim 84, wherein the blood vessel comprises a vein.

87. An assembly for insertion into a body passageway comprising:

a deformable member having an interior surface defining a longitudinal passage, the deformable member being deformable from a first geometrically stable configuration to a second geometrically stable configuration; and

a tissue disposed adjacent to the interior surface of the deformable member, wherein the tissue comprises a tubular structure, wherein the tubular structure comprises a mammalian blood vessel.

88. The assembly of claim 87, wherein the mammalian blood vessel comprises a human blood vessel.

89. The assembly of claim 68, wherein the blood vessel is secured to the deformable member.

90. The assembly of claim 89, wherein the blood vessel is stitched to the deformable member.

91. The assembly of claim 89, wherein the blood vessel is glued to the deformable member.

94. The assembly of claim 68, further comprising a delivery sheath which facilitates insertion of the deformable member and the blood vessel into the body.

95. The assembly of claim 68, further comprising a catheter assembly disposed within the longitudinal passage to expand the deformable member.

96. A method of preparing a graft prosthesis for use within a body comprising the steps of:

providing a deformable member having an interior surface defining a longitudinal passage, the deformable member being deformable from a first geometrically stable configuration to a second geometrically stable configuration; and

providing a blood vessel adjacent to the interior surface of the deformable member.

98. The method of claim 96, further comprising the step of placing the blood vessel adjacent to an exterior surface of the deformable member.

99. The method of claim 96, wherein the blood vessel is at least as long as the longitudinal passage.

100. The method of claim 99, further comprising the step of placing the blood vessel so that a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

101. The method of claim 100, further comprising the step of folding the portion of the blood vessel that extends beyond the end of the longitudinal passage back over a first end of the deformable member to a position adjacent to an exterior surface of the deformable member.

102. The method of claim 101, further comprising the step of folding the extending portion of the blood vessel back to form a sleeve.

106. The method of claim 96, further comprising the step of securing the blood vessel to the deformable member.

107. The method of claim 96, further comprising the step of stitching the blood vessel to the deformable member.

108. The method of claim 96, further comprising the step of gluing the blood vessel to the deformable member.

111. The method of claim 96, further comprising the step of disposing the graft prosthesis in a delivery sheath.

112. The method of claim 96, further comprising the step of disposing a catheter assembly within the longitudinal passage.

113. An assembly for use within a body comprising:
an expandable stent that is expandable from a first geometrically stable configuration
to a second geometrically stable configuration; and
a blood vessel configured to avoid exposure of the expandable stent to circulating
body fluids when the assembly is inserted into the body.

114. An assembly for use within a body comprising:
a deformable stent that is deformable from a first geometrically stable configuration to
a second geometrically stable configuration; and
a blood vessel configured to avoid exposure of the deformable stent to circulating
body fluids when the assembly is inserted into the body.

115. The method of claim 51, wherein the expandable member comprises a stent.

116. The method of claim 96, wherein the deformable member comprises a stent.

117. An assembly for use within a body to form a portion of a body passageway
comprising:
an expandable member that is expandable from a first geometrically stable
configuration to a second geometrically stable configuration; and
a blood vessel disposed adjacent to the expandable member,
wherein the assembly is constructed such that the assembly forms the portion of the
body passageway after expansion of the expandable member.

118. The assembly of claim 117, wherein the assembly is for insertion into the body
passageway.

119. The assembly of claim 117, wherein the expandable member comprises a stent.

120. The assembly of claim 117, wherein the expandable member has a first
configuration to allow for insertion of the assembly into the body, and wherein the
expandable member has a second configuration when the assembly forms the portion of the
body passageway.

121. The assembly of claim 117, wherein the blood vessel is disposed adjacent to an interior surface of the expandable member.

122. The assembly of claim 117, wherein the blood vessel is disposed adjacent to an exterior surface of the expandable member.

123. The assembly of claim 117, wherein the expandable member has an interior surface defining a longitudinal passage, and wherein the blood vessel is at least as long as the longitudinal passage.

124. The assembly of claim 117, wherein the expandable member has an interior surface defining a longitudinal passage, and wherein a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

125. The assembly of claim 117, wherein the blood vessel is secured to the expandable member.

126. The assembly of claim 117, further comprising a delivery sheath which facilitates insertion of the expandable member and the blood vessel into the body.

127. The assembly of claim 117, further comprising a device disposed within the expandable member to expand the expandable member.

128. The assembly of claim 117, wherein the expandable member is deformable.

129. An assembly for [insertion into] use within a body to form a portion of a body passageway comprising:

a deformable member that is deformable from a first geometrically stable configuration to a second geometrically stable configuration; and

a blood vessel disposed adjacent to the deformable member,

wherein the assembly is constructed such that the assembly forms the portion of the body passageway after deformation of the deformable member.

130. The assembly of claim 129, wherein the assembly is for insertion into the body passageway.

131. The assembly of claim 129, wherein the deformable member comprises a stent.

132. The assembly of claim 129, wherein the deformable member has a first configuration to allow for insertion of the assembly into the body, and wherein the deformable member has a second configuration when the assembly forms the portion of the body passageway.

133. The assembly of claim 129, wherein the blood vessel is disposed adjacent to an interior surface of the deformable member.

134. The assembly of claim 129, wherein the blood vessel is disposed adjacent to an exterior surface of the deformable member.

135. The assembly of claim 129, wherein the deformable member has an interior surface defining a longitudinal passage, and wherein the blood vessel is at least as long as the longitudinal passage.

136. The assembly of claim 129, wherein the deformable member has an interior surface defining a longitudinal passage, and wherein a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

137. The assembly of claim 129, wherein the blood vessel is secured to the deformable member.

138. The assembly of claim 129, further comprising a delivery sheath which facilitates insertion of the deformable member and the blood vessel into the body.

139. The assembly of claim 129, further comprising a device disposed within the deformable member to deform the deformable member.

vessel being at least as long as said axial extent of said longitudinal passage and having a radial extent corresponding to the radial extent of said peripheral wall when said cylindrical-shaped member is in an expanded condition;

- b. disposing said prosthesis on a catheter;
- c. inserting said prosthesis and catheter within a body passageway by catheterization of the body passageway; and
- d. expanding said prosthesis to bring said prosthesis into contact with the body passageway and to implant said prosthesis in the passageway.

19. The method according to claim 18 wherein the expanding of said prosthesis causes enlargement of the lumen of the body passageway.

20. A method for forming a composite graft comprising:

- a. providing an expandable member comprising a cylindrical-shaped member having first and second ends, a longitudinal axis between said ends, one or more structural members between said ends defining a peripheral wall, and a longitudinal passage along said longitudinal axis between said ends;
- b. providing a blood vessel having a length greater than the axial extent of said passage of said cylindrical-shaped member;
- c. positioning the blood vessel within said longitudinal passage of said cylindrical-shaped member so that a portion of said blood vessel protrudes from at least one of said ends;
- d. folding said protruding portion of said blood vessel over the edge of said end and over at least a portion of the external surface of said peripheral wall; and
- e. securing said blood vessel to said cylindrical-shaped member.

21. The method according to claim 20 wherein step (c) is conducted so that the blood vessel protrudes from both of said ends and step (d) is conducted at both of said ends.

22. An assembly for use within a body comprising:

an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable from a first geometrically stable configuration to a second geometrically stable configuration; and

a blood vessel disposed adjacent to the interior surface of the expandable member.

23. The assembly of claim 22, wherein the expandable member is cylindrical-shaped.

24. The assembly of claim 22 wherein the expandable member comprises a stent.

25. The assembly of claim 22, wherein the expandable member has a first configuration to allow for insertion of the assembly into a lumen in the body.

26. The assembly of claim 25, wherein the expandable member has a second configuration whereby a diameter of the longitudinal passageway approximately matches a diameter of the lumen.

28. The assembly of claim 22, wherein the blood vessel is disposed adjacent to an exterior surface of the expandable member.

29. The assembly of claim 22, wherein the blood vessel is at least as long as the longitudinal passage.

30. The assembly of claim 22, wherein a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

31. The assembly of claim 30, wherein the portion of the blood vessel that extends beyond the end of the longitudinal passage folds back over a first end of the expandable member to a position adjacent to an exterior surface of the expandable member.

32. The assembly of claim 31, wherein the extending portion of the blood vessel folds back to form a sleeve.

38. An assembly for insertion into a body passageway comprising:
an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable from a first geometrically stable configuration to a second geometrically stable configuration; and

a tissue disposed adjacent to the interior surface of the expandable member,
wherein the tissue comprises a body tissue,
wherein the body tissue comprises a blood vessel.

39. The assembly of claim 38, wherein the blood vessel comprises at least one of a
recently extracted blood vessel and a thawed blood vessel which had been previously
extracted and frozen.

40. The assembly of claim 38, wherein the blood vessel comprises a vein.

41. An assembly for insertion into a body passageway comprising:
an expandable member having an interior surface defining a longitudinal passage, the
expandable member being expandable from a first geometrically stable configuration to a
second geometrically stable configuration; and
a tissue disposed adjacent to the interior surface of the expandable member,
wherein the tissue comprises a tubular structure,
wherein the tubular structure comprises a mammalian blood vessel.

42. The assembly of claim 41, wherein the mammalian blood vessel comprises a
human blood vessel.

43. The assembly of claim 22, wherein the blood vessel is secured to the
expandable member.

44. The assembly of claim 43, wherein the blood vessel is stitched to the
expandable member.

45. The assembly of claim 43, wherein the blood vessel is glued to the expandable
member.

46. The assembly of claim 43, wherein the blood vessel is welded to the expandable
member.

140. The assembly of claim 129, wherein the deformable member is expandable.

141. (Twice amended) A method of forming a portion of a body passageway comprising the steps of:

providing an expandable member;

providing a blood vessel adjacent to an interior surface of the expandable member;

inserting the expandable member and the blood vessel into the body; and

expanding the expandable member subsequent to inserting the expandable member and the blood vessel into the body.

142. The method of claim 141, wherein the expandable member is deformable.

143. The method of claim 141, wherein the expandable member comprises a stent.

145. The method of claim 141, wherein the step of providing the blood vessel includes providing the blood vessel adjacent to an exterior surface of the expandable member.

146. The method of claim 141, wherein the expandable member has an interior surface defining a longitudinal passage, and wherein the blood vessel is at least as long as the longitudinal passage.

147. The method of claim 141, wherein the expandable member has an interior surface defining a longitudinal passage, and wherein a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

148. The method of claim 141, wherein the step of expanding the expandable member causes the expandable member to assume an expanded configuration, and wherein the expandable member in the expanded configuration and the blood vessel form the portion of the body passageway.

149. The method of claim 141, wherein the step of expanding the expandable member includes expanding the blood vessel.

150. The method of claim 141, wherein the step of expanding the expandable member includes actuating a device disposed within the expandable member to expand the expandable member.

151. The method of claim 141, further comprising the step of securing the blood vessel to the expandable member.

152. The method of claim 141, further comprising the step of providing a delivery sheath to facilitate the insertion of the expandable member and the blood vessel into the body.

153. A method of forming a portion of a body passageway comprising the steps of:
providing a deformable member;
providing a blood vessel adjacent to the deformable member;
inserting the deformable member and the blood vessel into the body; and
deforming the deformable member subsequent to inserting the deformable member and the blood vessel into the body such that the deformable member maintains a deformed configuration.

154. The method of claim 153, wherein the deformable member is expandable.

155. The method of claim 153, wherein the deformable member comprises a stent.

156. The method of claim 153, wherein the step of providing the blood vessel includes providing the blood vessel adjacent to an interior surface of the deformable member.

157. The method of claim 153, wherein the step of providing the blood vessel includes providing the blood vessel adjacent to an exterior surface of the deformable member.

158. The method of claim 153, wherein the deformable member has an interior surface defining a longitudinal passage, and wherein the blood vessel is at least as long as the longitudinal passage.

159. The method of claim 153, wherein the deformable member has an interior surface defining a longitudinal passage, and wherein a portion of the blood vessel extends beyond at least one end of the longitudinal passage.

160. The method of claim 153, wherein the deformable member in the deformed configuration and the blood vessel form the portion of the body passageway.

161. The method of claim 153, wherein the step of deforming the deformable member includes expanding the blood vessel.

162. The method of claim 153, wherein the step of deforming the deformable member includes actuating a device disposed within the deformable member to deform the deformable member.

163. The method of claim 153, further comprising the step of securing the blood vessel to the deformable member.

164. The method of claim 153, further comprising the step of providing a delivery sheath to facilitate the insertion of the deformable member and the blood vessel into the body.

165. An assembly for use within a body comprising:
an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable to an extent necessary to secure the expandable member relative to a body passageway; and
a blood vessel disposed adjacent to the interior surface of the expandable member.

166. A method of preparing a graft prosthesis for use within a body comprising the steps of:
providing an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable to an extent necessary to secure the expandable member relative to a body passageway; and
providing a blood vessel adjacent to the interior surface of the expandable member.

167. An assembly for use within a body comprising:
a deformable member having an interior surface defining a longitudinal passage, the
deformable member being deformable to an extent necessary to secure the deformable
member relative to a body passageway; and
a blood vessel disposed adjacent to the interior surface of the deformable member.

168. A method of preparing a graft prosthesis for use within a body comprising the
steps of:
providing a deformable member having an interior surface defining a longitudinal
passage, the deformable member being deformable to an extent necessary to secure the
deformable member relative to a body passageway; and
providing a blood vessel adjacent to the interior surface of the deformable member.

169. An assembly for use within a body comprising:
an expandable stent that is expandable to an extent necessary to secure the expandable
stent relative to a body passageway; and
a blood vessel configured to avoid exposure of the expandable stent to circulating
body fluids when the assembly is inserted into the body.

170. An assembly for use within a body comprising:
a deformable stent that is deformable to an extent necessary to secure the deformable
stent relative to a body passageway; and
a blood vessel configured to avoid exposure of the deformable stent to circulating
body fluids when the assembly is inserted into the body.

171. (Thrice amended) An assembly for use within a body to form a portion of a
body passageway comprising:
an expandable member that is expandable to an extent necessary to secure the
expandable member relative to the body passageway; and
a blood vessel disposed adjacent to an interior surface of the expandable member,
wherein the assembly is constructed such that the assembly forms the portion of the
body passageway after expansion of the expandable member.

172. An assembly for use within a body to form a portion of a body passageway comprising:

a deformable member that is deformable to an extent necessary to secure the deformable member relative to the body passageway; and

a blood vessel disposed adjacent to the deformable member, wherein the assembly is constructed such that the assembly forms the portion of the body passageway after deformation of the deformable member.

176. An assembly for use within a body comprising:

an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable from a first geometrically stable configuration to a second geometrically stable configuration; and

a tissue disposed adjacent to the interior surface of the expandable member, wherein the tissue comprises a body tissue, wherein the body tissue comprises a blood vessel.

177. The assembly of claim 176, wherein the blood vessel comprises at least one of a recently extracted blood vessel and a thawed blood vessel which had been previously extracted and frozen.

178. The assembly of claim 176, wherein the blood vessel comprises a vein.

179. An assembly for use within a body comprising:

an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable from a first geometrically stable configuration to a second geometrically stable configuration; and

a tissue disposed adjacent to the interior surface of the expandable member, wherein the tissue comprises a tubular structure, wherein the tubular structure comprises a mammalian blood vessel.

180. The assembly of claim 179, wherein the mammalian blood vessel comprises a human blood vessel.

190. An assembly for use within a body comprising:
a deformable member having an interior surface defining a longitudinal passage, the
deformable member being deformable from a first geometrically stable configuration to a
second geometrically stable configuration; and
a tissue disposed adjacent to the interior surface of the deformable member,
wherein the tissue comprises a body tissue,
wherein the body tissue comprises a blood vessel.

191. The assembly of claim 190, wherein the blood vessel comprises at least one of
a recently extracted blood vessel and a thawed blood vessel which had been previously
extracted and frozen.

192. The assembly of claim 190, wherein the blood vessel comprises a vein.

193. An assembly for use within a body comprising:
a deformable member having an interior surface defining a longitudinal passage, the
deformable member being deformable from a first geometrically stable configuration to a
second geometrically stable configuration; and
a tissue disposed adjacent to the interior surface of the deformable member,
wherein the tissue comprises a tubular structure,
wherein the tubular structure comprises a mammalian blood vessel.

194. The assembly of claim 193, wherein the mammalian blood vessel comprises a
human blood vessel.

202. An assembly comprising:
an expandable member having an interior surface defining a longitudinal passage, the
expandable member being expandable from a first geometrically stable configuration to a
second geometrically stable configuration; and
a blood vessel disposed adjacent to the interior surface of the expandable member
when the assembly is inserted in a body.

203. An assembly comprising:

a deformable member having an interior surface defining a longitudinal passage, the deformable member being deformable from a first geometrically stable configuration to a second geometrically stable configuration; and

a blood vessel disposed adjacent to the interior surface of the deformable member when the assembly is inserted in a body.

204. An assembly comprising:

an expandable member having an interior surface defining a longitudinal passage, the expandable member being expandable to an extent necessary to secure the expandable member relative to a body passageway; and

a blood vessel disposed adjacent to the interior surface of the expandable member when the assembly is inserted in a body.

205. An assembly comprising:

a deformable member having an interior surface defining a longitudinal passage, the deformable member being deformable to an extent necessary to secure the deformable member relative to a body passageway; and

a blood vessel disposed adjacent to the interior surface of the deformable member when the assembly is inserted in a body.